Physical Review Letters 2004 vol.93 N16, pages 167601-1-167601-4

Na NMR evidence for charge order and anomalous magnetism in Na xCoO2

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Abstract

The aligned single phase powder samples were provided by the material synthesis and characterization of a sodium (Na) nuclear magnetic resonance (NMR) evidence for change order and anomalous magnetism in NaxCoO 2. Calculations in a point charge model which applied on the fully ionized Na site were also performed. Three Na sites were identified from their single valued quadrupole effects and magnetic shifts. A very intriguing metallic phase with a magnetism which resembles at high T that of local moments with large antiferromagnetic interactions was revealed.

http://dx.doi.org/10.1103/PhysRevLett.93.167601